

CLAIMS

1. A string-striking device for a piano, comprising a long weight lever, one for every key, which is disposed along a length direction of the key at an upper part on a side opposite to a playing side of the key and which is arranged such that one end of the weight lever is fixed to a piano body so as to allow the weight lever to freely swing up and down, and the other open end, which can be vertically displaced, is brought into contact with an upper surface of the key and applies its own weight on the key.
2. The string-striking device for a piano according to claim 1, further comprising a long stopper rail that is secured to the piano body above the weight lever so that the stop rail extends over a plurality of weight levers and restricts upward swing of the plurality of weight levers.
3. The string-striking device for a piano according to claim 1 or 2, further comprising a moving mechanism that moves the weight lever in the length direction of the key.
4. The string-striking device for a piano according to one of claims 1 to 3, further comprising a long lifting rail that is disposed between the weight lever and the key, so

that the lifting rail extends over a plurality of keys and is fixed to the piano body in such a manner that, by lifting the weight levers, the lifting rail can displace the weight levers from a normal position where the levers can touch the keys to a holding position where the levers are separated from the keys.

5. The string-striking device for a piano according to claim 4, further comprising a connecting member, one end of which being connected to the lifting rail and the other end extending outside the piano,

wherein the lifting rail can be displaced by operating the other end of the connecting member outside the piano.

6. The string-striking device for a piano according to claim 5, wherein the other end of the connecting member is a playing pedal.

7. The string-striking device for a piano according to one of claims 1 to 5, wherein a part at which the weight lever touches the key is constituted by a roller that can roll along the upper surface of the key.

8. The string-striking device for a piano according to one of claims 1 to 6, wherein a lever receiving screw is

provided on a surface of the key facing the weight lever while a frictional reducing layer is provided on an undersurface of the weight lever facing the lever receiving screw, the friction reducing layer being made from a material that allows a frictional force between the lever receiving screw and the weight lever to be smaller than the frictional force produced by direct contact therebetween, and

the friction reducing layer is made from a material that allows the frictional force to be smaller as the friction reducing layer is provided closer to a rotation shaft which is a center of swing of the weight lever.

9. A string-striking device for a piano, comprising a long weight lever, one for every key, which is disposed along a length direction of the key at an upper part on a side opposite to a playing side of the key and which is arranged such that one end of the weight lever is fixed to a piano body so as to allow the weight lever to freely swing up and down, and the other open end, which can be vertically displaced, is brought into contact with an upper surface of the key and applies its own weight on the key;

a weight lever stabilizing rail that is secured to the piano body above the weight lever so as to extend over a

plurality of weight levers and restricts upward swing of the plurality of weight levers, the weight lever stabilizing rail being formed in such a manner that an undersurface thereof is curved upward toward a direction opposite to the playing side of the piano; and

a moving mechanism that moves the weight lever along the length direction of the key.

10. The string-striking device for a piano according to claim 9, wherein a lever receiving screw is set at a position on the upper surface of each key where the weight of the weight lever can be supported in any way even if the weight lever is moved by the moving mechanism.

11. The string-striking device for a piano according to claim 9 or 10, wherein a sound-deadening material is applied to the undersurface of the weight lever stabilizing rail.